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ABSTRACT

Described is a study designed to document the degree of interest in the environment by Wisconsin adults and to give direction to future statewide environmental education efforts. A team of interviewers telephoned a random sample of over 600 persons and questioned them about their: (1) interest in environment and nature topics; (2) desire to know more about these topics; (3) uses for environmental information; (4) current activities related to the environment; (5) media usage; and (6) demographic characteristics. Following a description of the survey methodology and results is a discussion of the study's implications for the philosophy, policy, and overall direction of environmental education efforts of the University of Wisconsin's extension program. A copy of the interview questions is included. (Author/WB)

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FINAL REPORT
1981

ENVIRONMENTAL EDUCATION NEEDS AND INTERESTS OF WISCONSIN ADULTS

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EXECUTIVE SUMMARY

The assessment of the "Environmental Education Needs and Interests of Wisconsin Adults" was undertaken by the Environmental Resources Unit and the Division of Program and Staff Development of the University of Wisconsin--Extension. The study was designed to document the degree of interest in the environment and to give direction to future statewide environmental education efforts.

The assessment provided a broad array of information on citizen interests, media preferences and uses of environmental information. This report provides detail regarding programming implications of the findings. A number of the findings regarding the philosophy, policy and overall direction of environmental education are highlighted as the Executive Summary.

- The Wisconsin adult population is highly interested in nature and the environment. Statistically, 99% of all persons interviewed were somewhat interested in at least one nature or environmental topic. They are also highly interested in learning more about environmental topics. This interest did not vary by the location in the state or the size of the community in which they resided. Interest did vary with the age, education level and occupation.
- Topics related to energy, water quality, waste disposal and plants (flowers, shrubs and trees) were of greatest interest.

- Interest in a wide variety of environmental topics varied significantly with age, education and occupation; but did not vary with the size and location of the home community. Occupation appears to be the best indicator of topical interest. A person profiled as middle-aged, with a high education level showed the greatest interest.
- Seventy-eight percent of the survey group indicated they had a use for environmental information. Respondents felt they could use environmental information in a nature hobby or recreational activity or in the home. Uses of environmental information varied significantly with age, education, occupation and location and size of the home community. The professional-technical person, 25-54 years old, with a college degree profiles the person who indicated the most use for environmental information. Rural areas, and farmers in particular, indicated the most work related uses of environmental information.
- Wisconsin residents are active in pursuing environmental information in a variety of ways. Sixty-eight percent indicated they used sources including literature; radio and television; visits to zoos, botanical gardens or wildlife areas; community environmental projects or environmental organizations; and classes to learn more about the environment. More than half the people felt that University Extension could help by providing more information.
- The majority of the people preferred to learn on their own; only 20% preferred to learn in a group. Radio or television,

written materials and displays or demonstrations were the three most preferred methods of receiving information.

- Persons interested in attending a group educational experience (class, field trip, etc.) were willing to travel and were willing to pay for the experience.
- Interest in environmental information should continue to grow above the already high levels. Middle-aged and more highly educated persons are most interested in environmental topics. People are interested in environmental information primarily for leisure time activity. The middle-aged, well-educated population is growing and has more leisure time.

INTRODUCTION

As early as 1975, sociologists were describing the decline of public support for the environmental movement.[1] Citing public opinion surveys and decrease in interest in and attendance at Earth Day-type activities, various authorities predicted that gains in environmental protection would be eclipsed by concern over inflation, rising energy costs and international affairs. These predictions were also associated with a decline in interest and funding for environmental projects at the federal level.

At the same time, faculty in University of Wisconsin-Extension were developing programs and educational materials to satisfy apparent public interest in the environment. Enrollments in environmental continuing education programs soared from an estimated 900 in fiscal year 1973-74 to over 4,000 in fiscal year 1978-79, more than quadrupling in the period of "environmental decline."

Informal indicators in Wisconsin also suggested continuing environmental interest. These included increased news reporting of environmental issues and an increase in the number of paid environmental advocates in the state.

In the summer of 1978, staff of the Environmental Resources Unit of University of Wisconsin-Extension began to design a survey which would document the degree of interest in the environment and would give direction to future statewide environmental education efforts. Part of the Environmental Resources Unit's mission is to develop and conduct specific environ-

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[1] cf. Dunlap and Dillman, "Decline in Public Support for Environmental Protection," Rural Sociology, Vol. 41, No. 3, Fall, 1976.

Frederick Buttel, Class Conflict, Environmental Conflict, and the Environmental Movement: The Social Bases of Mass Environmental Belief, 1968-1974, Ph.D., Department of Rural Sociology, UW-Madison, Madison, WI, 1975.

mental education programs and to provide leadership and coordination to University of Wisconsin System outreach programming in environmental education.

The survey was designed to answer the following questions:

1. Who is interested in learning more about the environment?
2. How strong is their interest?
3. What are they interested in?
4. How will they use the environmental information?
5. Through what media do they want to receive information?

DESIGN AND METHODOLOGY

General Design

To obtain unbiased responses from a representative sample of Wisconsin citizens, a random telephone survey was conducted by the Wisconsin Survey Research Laboratory (WSRL). More specifically, adults 18 and over were interviewed to determine:

* Interest in environment and nature topics.
* Desire to know more about topics.
* Uses for environmental information.
* Current environmentally related activities.
* Liklihood of using different ways of getting information on the environment.
* Age, education, occupation and place and size of the respondent's home community.

Development and Testing of the Interview Schedule

The interview schedule (Appendix A) was developed by the project team, Lowell Klessig, Stan Nichols, Lynn Entine and Susan Thomas, from the Environmental Resources Unit (ERU) and Boyd Rossing and Sara Steele from the Division of Program and Staff Development.

Selection of environment and nature topics for inclusion in the survey was based on several considerations. A list was developed that covered a broad range of environmental topics. To provide coverage with brevity, related topics were combined. For example, a question asked, "Are you interested in flowers, plants or trees?" Also the topics were worded in language that would be easily understood by all respondents. Thus, scientific and technical terms (i.e., botany, geology) were avoided. The

resulting list was divided into five broad areas. The first six items refer to topics representing elements in nature (i.e., animals, plants, etc.). The two following items refer to ecological areas or systems (i.e., wetlands, prairies, special places). Two items having to do with home environment and outdoor recreation follow. The list then includes four items related to management of resource systems. The final five items refer to environmental quality issues. (See Appendix A, Items 1-3)

The draft interview schedule was then reviewed and revised by staff of WSRL. Prior to full implementation, the schedule was given a pilot test by WSRL interviewers. They interviewed 25 adults to test length of interviews and wording. Appropriate changes were made.

Sampling

The Wisconsin Survey Research Laboratory drew a sample of telephone numbers using a variant of a random digit dialing scheme. This sampling procedure produces a probability sample representative of housing units with telephones in the state. The procedure is the standard WSRL sampling method for producing statewide samples.

Interviewing

The Survey Lab maintains a pool of trained interviewers. For this study, 25 interviewers were briefed on the study and assigned to conduct interviews. Interviewing took place during December, 1978, and January, 1979. People who could not be reached during business hours were called at night. A controlled selection procedure was used to determine which member of each household would be interviewed. This procedure insured that respondents were balanced by age and sex. Repeat calls were made until the interviewer reached the selected respondent.

Completion Rate

The total number of completed interviews was 659, out of a total of 903 possible interviews at working telephone numbers. Thus, the completion rate was 73%. About 14% of the sample refused to participate in the interview. The remaining non-completed interviews represent telephone numbers which were never answered, even after repeated calling.

Data Analysis

In addition to general interest in the environment, three specific questions were subjected to detailed analysis:

* What environmental topics are people specifically interested in?
* What uses do people have for environmental information?
* How do people want environmental information presented?

Each of these questions were evaluated at three different levels. The first level analyzed the results of the total sample on a statewide basis.

The second level analyzed the data to determine differences related to characteristics of the respondents. Responses were examined as a function of the following independent variables: education levels, ages, occupations, and size and location of their home communities. This analysis is termed the "magnitude" analysis because percentages reflect the proportion of the total sample and thus represent proportions of the statewide adult population with the characteristics being analyzed.

A third level analysis, the "focus" analysis, concentrated on the group which indicated they were interested in receiving information from Extension or were interested in at least one environmental topic and wanted to know more about it. The "focus" analysis looked at the same respondent

characteristics as the "magnitude" analysis, but it looked only at that portion of the sample that was interested in knowing more or receiving information. These results also display similarities and differences between the "focus" subpopulation and the statewide adult population.

Results from the interviews were computer tabulated by WSRL. Where appropriate, differences in results were tested for statistical significance using the chi-square (χ^2) test.

In some cases it was necessary to combine subgroups to provide a population large enough for meaningful statistical analysis. This was particularly the case when analyzing the influence of the geographic location of the home community and occupation. Originally, geographic results were divided into groups based on the University of Wisconsin-Extension (UWEX) District in which the home community was located. In order to provide a minimum of 75 respondents in each geographic area, some of the Extension Districts were combined. After consulting with the UWEX District Directors, the Western and Southwestern Districts were combined, and the Northern and Central Districts were combined. The original occupation groups (Appendix B) were combined into the following categories:

* Professional-Technical
* Farmer
* Manager, official
* Clerical-Sales
* Crafts, skilled
* Service-Transportation
* Factory, semi-skilled
* Laborer, unskilled
* Retired
* Homemaker
* Student-Unemployed

Appendix C describes the characteristics of the survey group with regard to location and size of their home community, age, education, sex and occupation. These characteristics are compared to appropriate census data as an indication of how this sample represents the total adult population of Wisconsin.

INTEREST IN LEARNING ABOUT THE ENVIRONMENT

General Interest in Environmental Topics

To determine general interest in learning more about environmental topics, a series of environmental topics were listed (see Appendix A). The respondents were asked whether they were very interested, somewhat interested, or not interested in each topic. Only five persons (less than 1%) indicated no interest in any topic.

Six of the listed topics (Appendix A, Number 1) dealt primarily with nature and natural history (i.e., bird study, wildflowers) and nine topics (Appendix A, Number 3) dealt primarily with environmental quality or environmental management (i.e., water quality, wildlife management). Within these subcategories, 81% of the people were very interested in at least one nature topic, and 1.5% were very interested in all six topics. Similarly, 87% of the people were very interested in at least one environmental quality-management topic, but 13.4% were very interested in all nine topics.

Interest in Learning

If a person was "very" or "somewhat" interested in at least one topic (99% of the respondents) they were asked if they would like to know more about the topic(s) they were interested in. Of this group, 64% answered "yes." Interest in knowing more about a topic varied significantly with age, education and occupation (Table 1), but it did not vary significantly with size or location of the home community.

Strength of Interest

Respondents were also asked how they would rank their interest in nature and the environment in comparison with their other interests. On

Table 1: Percent of survey population who would like to know more about environmental topics.

Age**		(N)
18-24	69%	(94)
25-34	73%	(192)
35-44	75%	(102)
45-54	67%	(96)
55-64	48%	(79)
65-89	38%	(96)
		(659)

Education**		(N)
Up to 8th grade	30%	(63)
Some high school	48%	(65)
High school graduate	66%	(293)
Some college	77%	(115)
College graduate	76%	(70)
Some graduate work	72%	(53)
		(659)

Occupation**		(N)
Professional, Technical	78%	(87)
Farmer	58%	(19)
Manager	77%	(65)
Clerical, Sales	65%	(102)
Craftsman	62%	(56)
Service, Transportation	65%	(54)
Factory	54%	(34)
Labor	84%	(19)
Retired	41%	(90)
Homemaker	50%	(83)
Student, Unemployed	80%	(29)
Not Ascertained		(1)
		(659)

**A χ^2 test showed differences to be significant at $p<.01$.

a 5-point scale (with 5 being the strongest interest), 81% indicated an interest level of "3" or above (Table 2).

Table 2: Strength of interest in nature and the environment.

Strongest Interest				Weakest Interest	Don't Know
5	4	3	2	1	
17%	25%	39%	10%	4%	5%

TOPICS OF INTEREST

Statewide Interest

After analyzing general interest in environmental topics, specific topics of interest were studied. People were asked to indicate whether they were "very interested," "somewhat interested" or "not interested" in the topics listed in Numbers 1, 2 and 3 of the interview schedule (Appendix A).

Table 3 displays the results of this question. The first column under "very interested" or "somewhat interested" indicates the percentage of the total sample which is interested in the topic. The second column indicates the percentage of the total sample which is interested in a topic and wants to learn more.[1] There are numerous reasons why people may be interested in a topic but do not wish to learn more. They may appreciate the topic, but have no desire to learn, or they may feel they already know enough about a topic. For programming purposes, the data were analyzed based on interest plus desire to learn. This analysis gives a better profile of the group desiring information.

Table 3 also displays topics in rank order according to the extent of strong interest. The topic of most interest, based on the "very interested" category is listed first. Saving home energy; water quality; energy sources; flowers, plants or trees; and trash and sewage disposal are the top five topics of interest based on this ordering.

When the "very interested" and the "somewhat interested" responses were combined, the rank did not change appreciably except for the following:

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[1]For exact wording of the question, consult Question 5a of the interview schedule (Appendix A). People were asked if they would like to know more about any of those topics they had an interest in. They were not asked if they wanted to know more about all, each or selected numbers of the topics.

(1) the bird or animal life category moved up from a rank of 12 to 4;

(2) backpacking moved down from a rank of 9 to 17; and

(3) energy sources moved down from a rank of 3 to 8.

In the case of bird and animal life, a change in rank indicates that there are relatively more people mildly interested in birds and animal life than in some other subjects. In the cases of backpacking and energy sources, it appears that people interested in the subject are either strongly interested or only slightly interested. A ranking system based on interest plus desire to know gives only slightly different results.

Table 3: Topics of interest.

	Very Interested In Topic[1]		Somewhat Interested In Topic[1]	
Saving Home Energy	76%	52%	20%	10%
Water Quality	61%	45%	26%	12%
Energy Sources (nuclear, coal, solar, etc.)	55%	42%	27%	16%
Flowers, Plants or Trees	52%	36%	41%	25%
Trash and Sewage Disposal	49%	36%	35%	21%
Ecosystems, Wetlands, Prairies, Forests, Lakes	48%	37%	37%	20%
Special Places (i.e., Baraboo Hills, etc.)	48%	37%	33%	19%
Gardening or Natural Landscaping	47%	33%	38%	23%
Backpacking, Canoeing, Fishing, Hunting	46%	34%	23%	14%
Pesticides and Weed Killers	46%	34%	34%	19%
Wildlife Management	45%	36%	35%	20%
Bird and Animal Life	42%	32%	44%	25%
Forestry	42%	31%	37%	24%
Management of Lakes and Coastlines	42%	33%	33%	20%
Land Use Planning	41%	32%	36%	23%
Fish or Other Waterlife	34%	25%	39%	24%
Weather Patterns or Climate	31%	23%	49%	32%
Stars or Planets	22%	18%	37%	24%
Rocks or Soils	14%	9%	38%	27%

N = (659)

[1]The first column of "very interested" or "somewhat interested" percentages indicate the percentage of the total sample which is interested in the topic. The second column is the percentage of the total sample which is interested in the topic and desires to know more.

Differences Related to Characteristics of the Respondents

The topics were further analyzed by comparing the responses which indicated the respondent was "very interested" in a topic and wanted to learn more by the respondent's age, education level, occupation, and size and location of the home community. As noted previously, this is referred to as the "magnitude" analysis because it represents the magnitude of interest shown by a representative sample of Wisconsin adults which varied with regard to the above characteristics.

Based on this analysis, strong interest in most topics did not vary significantly with location or with population of the home community. Where there is significant variation in topics there is no clear pattern to this variation. For instance, persons in the Southcentral District had more strong interest in stars than any other district, but the Southwestern and Western Districts were most interested in flowers (Table 4). Similarly, no clear pattern exists when looking at the size of home community (Table 5). This analysis is consistent with the data on general interest in environmental topics where no significant difference in interest was found based on location or population of the home community.

All the topics showed significant variation by age, occupation and education level. In general, persons with higher education levels and in the middle-aged group showed the greatest interest in most topics (Tables 6 and 7). The youngest age group was the most interested in backpacking, the most physically demanding topic. This age group was also the group most interested in stars. The oldest age group was most interested in flowers, shrubs and trees.

Managers, laborers, student/unemployed, professional-technical and skilled craftspeople showed the highest overall interest (Table 8).

Table 4: Respondents who were very interested in a topic and wanted to learn more by U.W. Extension District [1]

Topic of Interest / UW Extension District	Home Energy	Water Quality	Energy Sources	Flowers, etc.*	Trash	Wetlands, etc.*	Special Places*	Gardening	Backpacking	Pesticides	Wildlife Mgt.	Birds & Animals	Forestry	Lake Management	Land Use Plan.	Fish*	Weather	Stars**	Rocks or Soils		N
Northeast	46	43	36	39	31	22	31	34	27	35	31	29	24	27	24	22	24	11	11		(83)
North & Central	50	46	33	28	25	37	34	37	39	34	38	33	30	33	28	29	21	14	11		(78)
Southeast	55	46	46	37	37	41	41	35	36	32	39	34	34	34	31	31	26	18	8		(262)
Southcentral	55	48	49	33	36	42	43	27	38	41	34	31	31	37	39	19	24	33	10		(144)
Southwest & West	43	39	33	42	35	32	26	34	26	33	34	33	33	30	34	21	16	9	11		(92)
Statewide Results	52	45	42	36	36	37	37	33	34	34	36	32	31	33	32	25	23	18	9		(659)

[1]Cells indicate percentage who were very interested in a specific topic and wanted to know more.
*A χ^2 test showed the difference between districts to be significant at $p < .05$.
**A χ^2 test showed the difference between districts to be significant at $p < .01$.

Table 5: Respondents who were very interested in a topic and wanted to learn more by population of home community.[1]

Topic of Interest / Population	Home Energy	Water Quality**	Energy Sources*	Flowers, etc.	Trash	Wetlands, etc.**	Special Places*	Gardening	Backpacking	Pesticides	Wildlife Mgt.	Birds & Animals	Forestry	Lake Management	Land Use Plan.	Fish*	Weather	Stars**	Rocks or Soils		N
Rural	49	45	35	31	37	27	30	36	31	32	37	34	31	31	31	20	27	11	16		(103)
1,000-2,500	45	39	29	35	30	36	32	31	32	33	27	33	25	27	30	31	15	18	5		(102)
2,500-9,999	57	44	45	38	32	40	31	34	37	34	41	38	33	36	29	27	25	16	11		(97)
10,000-25,000	54	56	53	37	39	27	44	36	31	34	39	29	36	37	41	29	19	10	10		(59)
25,000-49,000	51	48	41	36	39	36	34	29	34	40	33	36	31	39	34	19	19	20	6		(80)
50,000-250,000	51	49	50	38	43	46	47	32	33	39	37	30	33	34	34	24	31	25	9		(118)
250,000 +	59	41	44	34	34	41	43	34	41	31	39	28	33	32	30	35	24	25	7		(100)
Statewide Results	52	45	42	36	36	37	37	33	34	34	36	32	31	33	32	25	23	18	9		(659)

[1]Cells indicate percentage who were very interested in a specific topic and wanted to know more.
*A χ^2 test showed the difference between population groups to be significant at $p > .05$.
**A χ^2 test showed the difference between population groups to be significant at $p > .05$.

Table 6. Respondents who were very interested in a topic and wanted to learn more by age.[1]**

Age \ Topic of Interest	Home Energy	Water Quality	Energy Sources	Flowers, etc.	Trash	Wetlands, etc.	Special Places	Gardening	Backpacking	Pesticides	Wildlife Mgt.	Birds & Animals	Forestry	Lake Management	Land Use Plan.	Fish	Weather	Stars	Rocks or Soils		N
18-24	50	37	45	27	38	38	48	28	54	33	37	22	28	32	35	17	24	30	2		(94)
25-34	64	58	52	32	34	46	36	34	49	41	44	34	39	44	36	27	23	24	9		(192)
35-44	62	55	45	46	46	44	47	43	40	46	44	40	37	33	32	40	28	15	8		(102)
45-54	54	49	46	49	48	41	52	41	23	37	41	45	36	44	42	38	29	18	17		(96)
55-64	38	37	33	33	32	23	19	25	9	29	25	28	29	22	34	16	20	9	13		(79)
65-89	29	19	18	30	18	17	18	23	8	13	13	22	11	11	9	11	12	7	8		(96)
Statewide Results	52	45	42	36	36	37	37	33	34	34	36	32	31	33	32	25	23	18	9		(659)

[1]Cells indicate percentage who were very interested in a specific topic and wanted to know more.
**A χ^2 test showed all differences between age groups to be significant at $p < .01$.

Table 7: Respondents who were very interested in a topic and wanted to learn more by education level.[1]**

Education Level \ Topic of Interest	Home Energy	Water Quality	Energy Sources	Flowers, etc.	Trash	Wetlands, etc.	Special Places	Gardening	Backpacking	Pesticides	Wildlife Mgt.	Birds & Animals	Forestry	Lake Management	Land Use Plan.	Fish	Weather	Stars	Rocks or Soils		N
Up to 8th grade	27	13	13	22	8	15	15	17	7	7	7	22	13	8	8	8	7	3	8		(63)
Some High School	34	30	25	25	34	22	22	23	19	23	19	19	14	14	9	11	9	8	0		(65)
High School Graduate	54	44	39	40	37	38	35	34	37	35	18	34	34	33	33	29	24	16	10		(293)
Some College	63	57	56	36	44	45	45	36	38	41	23	33	36	41	40	31	30	23	11		(115)
College Graduate	61	61	60	40	43	40	44	47	39	53	26	26	40	43	39	24	34	23	16		(70)
Some Graduate Work	58	66	60	40	40	52	68	30	54	42	36	46	40	60	56	34	28	46	6		(53)
Statewide Results	52	45	42	36	36	37	37	33	34	34	36	32	31	33	32	25	23	18	9		(659)

[1]Cells indicate percentage who were very interested in a specific topic and wanted to know more.

**A χ^2 test showed all differences between education levels to be significant at $p < .01$.

Table 8: Respondents who were interested in a topic and wanted to learn more by occupation[1]

Occupation \ Topic of Interest	Home Energy	Water Quality	Energy Sources	Flowers, etc.	Trash	Wetlands, etc.	Special Places	Gardening	Backpacking	Pesticides	Wildlife Mgt.	Birds & Animals	Forestry	Lake Management	Land Use Plan.	Fish	Weather	Stars	Rocks or Soils		N
Professional-Technical	64	57	56	33	37	44	46	36	54	44	44	33	43	41	33	20	23	30	9		(87)
Farmer	47	42	26	37	42	42	21	11	26	47	53	37	42	21	37	16	37	16	32		(19)
Manager	68	68	69	46	62	62	63	38	45	57	48	52	51	62	65	57	38	35	15		(65)
Clerical	54	49	45	40	39	32	37	38	29	39	31	26	26	35	32	23	24	14	9		(102)
Crafts-skilled	57	50	48	39	48	36	39	39	34	34	45	39	29	34	36	29	23	14	9		(56)
Service	54	43	46	37	39	39	44	35	37	37	41	39	31	30	31	26	24	13	6		(54)
Factory	49	30	25	23	21	28	28	25	45	21	28	21	26	19	25	21	15	15	6		(54)
Laborer	79	74	37	58	26	79	26	32	63	16	68	63	68	74	32	68	47	5	0		(19)
Retired	26	19	18	25	22	16	18	25	5	14	13	22	13	13	10	10	14	8	8		(90)
Homemaker	41	35	28	41	23	24	24	38	20	28	24	26	18	21	22	22	15	11	10		(83)
Student - Unemployed	62	62	66	28	52	62	62	21	62	52	66	34	52	55	55	24	34	52	7		(29)
Statewide Results	52	45	42	36	36	37	37	33	34	34	36	32	31	33	32	25	23	18	9		(658)

[1]Cells indicate percentage who were very interested in a specific topic and wanted to know more.

**A χ^2 test showed all differences between occupations to be significant at $p < .01$.

Retired persons showed the lowest interest. Farmers, clerical, skilled crafts and service had about the same overall interest.

Focus on the Subpopulation Who Wanted to Know More About Topics Which Interested Them

Further analyses were directed at the subpopulation which wanted to know more about topics which interested them. The purpose was to determine if this group was more homogeneous and if their patterns of interest were different from the whole sample. The percentage of people interested in specific topics within this subpopulation was calculated. The resulting percentages were compared among those differing in education, age, occupation and location and size of home community. The chi-square statistic was used to test for significant differences between groups.

To clarify the differences between the "magnitude" and "focus" analysis, it should be remembered that the number of people interested in any topic is the same for both analyses. In the "magnitude" analysis, the question is, what percentage of the total sample is interested in learning about a topic? In the "focus" analysis, the question is, what percentage of those who are interested in learning about the environment are interested in the topic? Both analyses are useful for programming purposes and the uses will become more apparent when programming is discussed later in the report.

The basic patterns discovered in the previous section did not change in the "focus" analysis. However, some variations did occur using this method of analysis. Of great interest was the pattern of significant differences among sub-groups. The population interested in knowing more about topics, as might be expected, is more homogeneous than the population as a whole. In general, fewer differences were noted. However, statis-

tically significant differences in interest were shown in 15 out of the 19 topics when occupation (Table 9) was considered, 12 when age (Table 10) was considered, nine when education level was considered, seven when population was considered and only four when Extension District was considered. Thus, occupation and age continue to be important predictors of topical interest among this more homogeneous group which is interested in learning more about the environment. It would appear that occupation is the single most important variable to consider when predicting topical interests. It is useful to remember that occupation is correlated with some of the other characteristics such as education and age.

Similarity and Dissimilarity of Interest, Based on Occupation

Because occupation appears to be a key predictor of specific interest in environmental topics, further analysis was performed on the influence of occupation. This was done using ordination techniques.[1] The ordination was done on the data presented in Table 9 and is shown in Figure 1. Only topics where a significant difference in interest was displayed across occupation groups were included in the ordination.

In Figure 1, distance represents similarity of interest in topics. The occupations which are closest together in the ordination have the most similar interests and those that are furtherest apart are most dissimilar. For instance, professional/technical people and farmers have very similar interests in environmental topics, but laborers and retired persons have very dissimilar interests. Likewise, the service population has somewhat similar interests to professional-technical people and clerical people, but

[1]Cox, George W. 1967. Laboratory Manual of General Ecology. W. C. Brown Co., Dubuque, IA, 165 pp.

Table 9: Respondents who want to know more who were interested in a topic by occupation.[1]

Topic of Interest / Occupation	Home Energy	Water Quality*	Energy Sources**	Flowers, etc.**	Trash*	Wetlands, etc.**	Special Places**	Gardening**	Backpacking**	Pesticides**	Wildlife Mgt.**	Birds & Animals	Forestry*	Lake Management**	Land Use Plan.**	Fish**	Weather	Stars**	Rocks or Soils		N Interested
Professional-Technical	82	74	72	43	47	56	59	46	69	56	56	43	54	53	43	25	56	38	12		(68)
Farmer	82	73	45	64	73	73	36	18	45	82	91	64	73	36	64	27	73	27	55		(11)
Manager	88	88	90	60	80	80	82	50	58	74	62	68	66	80	84	74	80	46	20		(50)
Clerical	83	76	70	62	61	50	53	54	45	61	48	41	41	53	50	35	50	21	14		(66)
Crafts	78	68	66	54	66	49	54	54	46	46	61	54	39	46	49	39	49	20	12		(41)
Service	83	66	71	57	60	60	69	54	57	57	63	60	49	46	49	40	60	20	9		(35)
Factory	84	52	42	39	35	48	48	42	77	35	48	35	45	32	42	35	48	26	10		(31)
Labor	94	83	44	69	31	94	31	38	75	19	81	75	81	88	38	81	94	6	0		(16)
Retired	64	47	44	61	53	39	47	65	11	33	31	53	31	31	25	25	39	19	19		(36)
Homemaker	83	71	56	83	46	49	49	76	39	56	49	51	37	41	44	44	49	22	20		(41)
Student-Unemployed	72	72	76	32	60	72	72	24	72	60	76	40	60	64	64	28	72	60	8		(25)

[1] Cells indicate percentage of those who wanted to know more that were "very interested" in a specific topic.

* A χ^2 test showed the difference between occupations to be significant at $p < .05$.

** A χ^2 test showed the difference between occupations to be significant at $p < .01$.

Table 10: Respondents who want to know more who were interested in a topic by age.[1]

Age \ Topic of Interest	Home Energy	Water Quality*	Energy Sources	Flowers, etc.**	Trash*	Wetlands, etc.	Special Places*	Gardening	Backpacking**	Pesticides**	Wildlife Mgt.	Birds & Animals**	Forestry	Lake Management**	Land Use Plan.**	Fish**	Weather	Stars**	Rocks or Soils**		N Interested
18-24	72	54	65	38	55	55	69	40	78	48	54	32	40	46	51	25	35	43	3		(65)
25-34	87	79	70	44	47	62	49	46	67	55	60	46	53	60	49	37	32	33	12		(141)
35-44	83	74	61	62	62	59	63	58	54	62	59	54	50	41	43	54	38	20	11		(76)
45-54	80	73	69	73	72	61	77	61	34	55	61	67	53	66	63	56	44	27	25		(64)
55-64	79	76	68	68	66	47	39	53	18	61	53	58	61	45	71	34	42	18	26		(38)
65-89	76	50	47	79	47	44	50	66	21	35	35	59	29	29	24	29	32	18	21		(34)

[1] Cells indicate percentage of those who wanted to know more that were "very interested" in a specific topic.

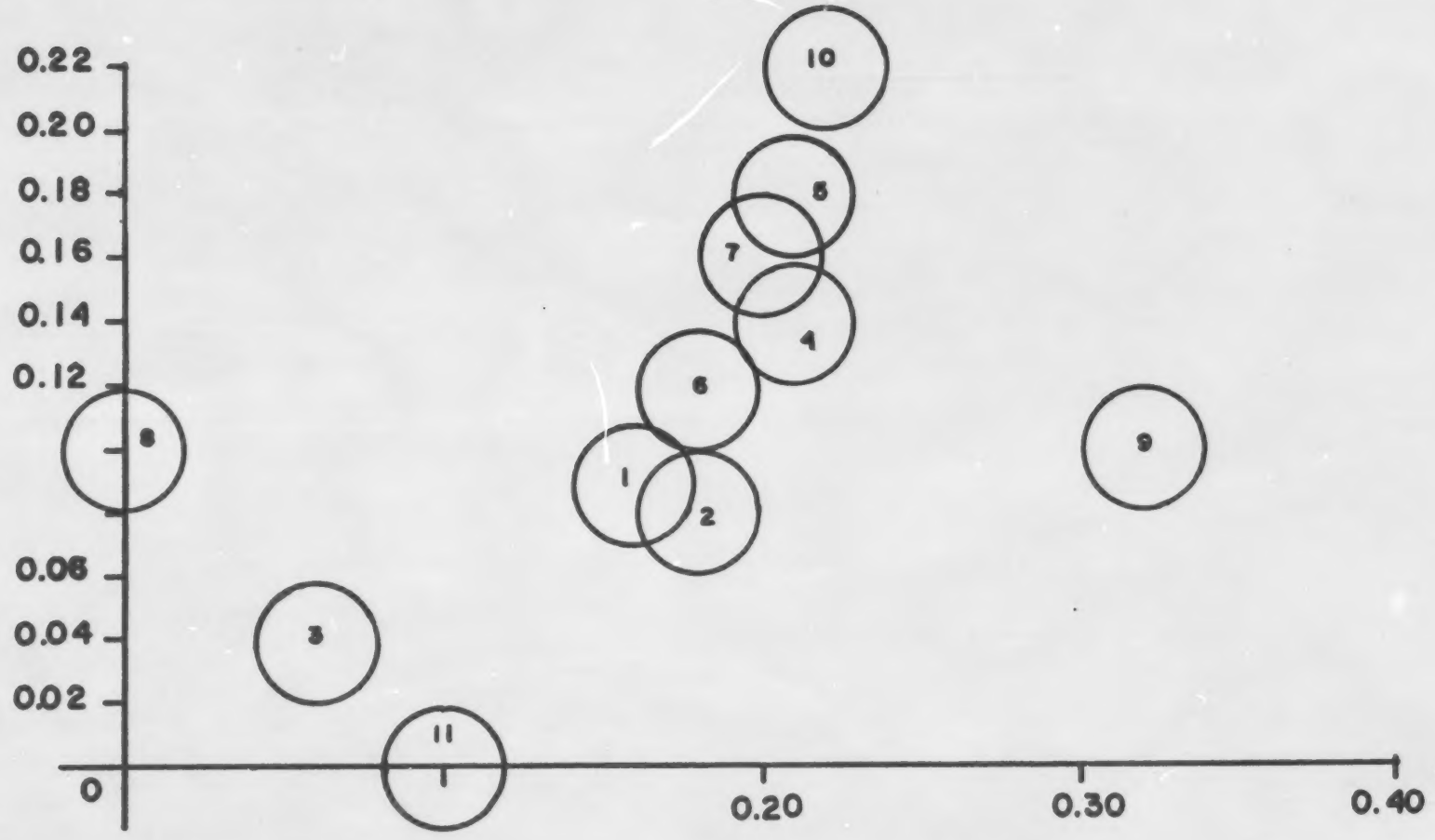
* A χ^2 test showed the differences between age groups to be significant at $p < .05$.

** A χ^2 test showed the differences between age groups to be significant at $p < .01$.

Figure 1: Ordination of occupation based on interest in a topic.

This ordination is based on the "very interested" responses for the subpopulation who were interested in a topic and wanted to know more about it.

1. Professional-technical
2. Farmer
3. Manager
4. Clerical-sales
5. Craftsperson
6. Service-transportation
7. Factory
8. Labor
9. Retired
10. Homemaker
11. Student-unemployed


0.22
0.20
0.18
0.16
0.14
0.12
0.06
0.04
0.02
0
0.20
0.30
0.40
10
5
7
4
6
8
9
1
2
3
11

interest in specific topics between service and homemakers differs to about the same extent as interest of service and managers.

This sort of information can be used in two important ways. First, if one is programming for a general audience, it would be wise to pick topics that were of interest to the greatest collection of occupation groups. That is, one would probably select topics of interest to factory-clerical-service-professional-technical-farmer group and program accordingly. On the other hand, if one was programming for managers, their unique interests should be recognized.

Programming shouldn't be based on topical interest alone. Uses of information and delivery system preferences should also be considered. Professional-technical people, farmers and service people may have similar interests. One group may want information to use in their work when the other may want information for a hobby or recreational pursuit. One group may want the information presented on television and the other in occupational journals. All elements of program selection and delivery should be considered.

Additional Responses

In addition, people were asked an open-ended question: "Are there any additional nature, environment or outdoor recreation topics that you are interested in?" As might be expected, the answers were quite varied. "How state parks are run," "more availability for the handicapped," "recycling," "preservation of endangered species " (this was mentioned several times), "winter outdoor sports " (mentioned several times), "metal detecting," "archeology," "rock climbing," and "how DNR runs things" are examples of some of the responses.

USES OF ENVIRONMENTAL INFORMATION

The respondents were asked if they would have a use for nature or environmental information in their work, in a nature hobby or recreational activity, in an organization or group they belong to, for their home and in trying to solve community environmental problems.

Of the respondents, 78% indicated they had at least one use for the information. It was thus evident that some people indicated a use for environmental information without indicating any interest in environmental information. The highest percentage felt they could use the information in a nature hobby or recreational activity and in the home (Table 11).

Table 11: Uses for Environmental Information

	Yes
In a nature hobby or recreational activity	57%
In your home	47%
To solve community problems	31%
In your work	26%
In an organization or group	13%

Differences Related to Characteristics of the Respondents

Percentages of those persons who indicated they had a use for environmental information were calculated for each characteristic (age, education, etc.). Each characteristic showed some significant variations for some uses (Tables 12-16).

Use in work and use in organizations varied significantly by Extension District. The Southeast and Southcentral Districts had the least amount of

Table 12: Use of environmental information by UW-Extension District.[1]

Use / UW Ext. District	Work**	Hobby	Organization	Home	Community Problems	N
Northeast	31	57	12	45	24	(83)
North and Central	33	60	15	41	26	(78)
Southeast	19	56	8	51	33	(262)
South-central	24	58	10	45	31	(144)
Southwest and West	39	52	29	48	36	(92)
Statewide Results	26	57	13	47	31	(659)

[1] Cells indicate percentage who had a use for information.

** A χ^2 test showed the difference between districts to be significant at $P < .01$.

Table 13: Use of environmental information by population of home community.[1]

Use / Population	Work**	Hobby	Organization	Home**	Community Problems	N
Rural	41	49	18	37	23	(103)
1,000 - 2,500	27	49	21	37	22	(102)
2,500 - 9,999	21	62	10	60	32	(97)
10,000 - 25,000	34	61	8	44	31	(59)
25,000 - 49,000	21	60	13	49	36	(80)
50,000 - 250,0000	25	44	12	54	40	(118)
250,000 +	17	55	5	49	33	(100)
Statewide Results	26	57	13	47	31	(659)

[1] Cells indicate percentage who had a use for information.

** A χ^2 test showed the difference between population groups to be significant at $p < .01$.

Table 14: Use of environmental information by age of the respondent.[1]

Use / Age	Work**	Hobby **	Organization	Home**	Community Problems**	N
18-24	17	64	2	47	24	(94)
25-34	33	67	13	58	39	(192)
35-44	36	67	19	46	31	(102)
45-54	31	57	14	55	41	(96)
55-64	24	48	14	49	30	(79)
65-89	8	26	15	18	11	(96)
Statewide Results	26	57	13	47	31	(659)

[1] Cells indicate percentage who had a use for information.

** A χ^2 test showed the difference between age groups to be significant at $p < .01$.

Table 15: Use of environmental information by education level of the respondent.[1]

Use / Level of Education	Work**	Hobby**	Organization	Home**	Community Problems**	N
Up to 8th Grade	3	21	11	22	8	(63)
Some High School	9	37	6	25	22	(65)
High School Graduate	29	59	11	53	30	(293)
Some College	23	63	18	50	37	(115)
College Graduate	37	70	13	60	50	(70)
Some Grad. Work	58	82	22	52	40	(53)
Statewide Results	26	57	13	47	31	(659)

[1] Cells indicate percentage who had a use for information.

** A χ^2 test showed the difference between education levels to be significant at $p < .01$.

Table 16: Use of environmental information by occupation of the respondent.[1]

Use / Occupation	Work**	Hobby**	Organization**	Home**	Community Problems**	N
Professional Technical	53	74	15	61	54	(87)
Farmer	63	32	26	42	5	(19)
Manager	46	75	31	58	38	(65)
Clerical - Sales	18	56	9	57	36	(102)
Crafts - Skilled	29	63	20	50	23	(56)
Service - Trans.	26	67	6	56	39	(54)
Factory	26	59	11	43	24	(54)
Laborer	21	74	11	63	21	(19)
Retired	9	28	11	20	13	(90)
Homemaker	10	41	6	29	22	(83)
Student - Unemployed	10	76	0	66	41	(29)
Statewide Results	26	57	13	47	31	(659)

[1] Cells indicate percentage who had a use for information.

** A χ^2 test showed the difference between occupations to be significant at $p < .01$.

use for information for work or in organizations. Rural areas had a greater use for environmental information for work and a lesser use for environmental information in the home than did more highly populated areas. Other than the above-mentioned differences there were no significant variations in projected uses based on population or location of the home community. Nearly every use showed variation by age, education and occupation.

The professional-technical or managerial person, 25-54 years old, with a college degree, profiles the person who indicated the highest use for environmental information. This group, consistent with the total population, (Table 11) is most likely to use the information in a hobby or in a recreational pursuit.

The group which had the least use for environmental information is profiled as a retired person, over 65 years of age, with a low educational level.

Farmers indicated more use for environmental information in their work than did any other group. Managers had more use for environmental information in organizations than did any other group.

Focus on Those Who Wanted to Know More

The data were reanalyzed looking only at the persons who indicated they had uses for environmental information and wanted to know more about topics which interested them. This analysis did not provide any new information with regard to pattern of uses by respondents with different characteristics.

Open-Ended Comments

In addition, comments were soliciated on the type of information people thought they could use in their work, hobby, etc. A sampling of the comments gives an indication of the wide variety of types and the challenges of providing information: "Effects of hair spray on me and the environment--I'm a beautician," "all kinds--I'm a librarian," "I'm a farmer--all things pertain," "something that has to do with carpentry," "weatherstripping," "bridal paths for horses," "astronomy," "solar collectors for the home," "getting rid of dandelions," "ways to stay physically fit," "oil preservation," "don't have the vaguest idea," "anything current," "general, for answering curious youngster's question," "diet, nutrition and health issues," and "smell of papermills."

METHODS OF RECEIVING INFORMATION

Current Sources of Information on the Environment

There are a variety of ways in which people can learn about nature and the environment. Prior to determining preferences for future information, respondents were asked their current, environmentally related, learning activities. Questions included such things as: "Do you read books about nature and the environment?" "In the last year have you visited a zoo or botanical garden?" The results of these questions are summarized in Table 17.

Table 17: Current and past environmental activities.

Current Sources	Very Often	Fairly Often	Occasionally	Never
Read articles about nature & environment	15%	32%	50%	4%
Read books	5%	16%	54%	26%
TV or radio	18%	31%	42%	9%

Last Year's Activities:	Yes	No
Visited nature center or wildlife area	59%	41%
Visited zoo or botanical garden	58%	42%
Participated in community environmental project	26%	74%
Belong to organizations or groups that have an interest in nature and the environment	16%	84%
Course, workshop or field trip	11%	89%

One of the more interesting aspects of this series of questions is the high percentage of Wisconsin residents (sixteen percent) who indicated that they belong to environmental organizations. This compares to eight percent nationwide.[1] Clearly Wisconsin residents are active in pursuing environmental information in a variety of ways.

Preferred Style of Learning

Respondents were asked one general question covering their preferred style for learning about the environment. Among those who said they would like to learn more about the environment, a little over half preferred to learn on their own (by reading, watching television, asking someone, etc.). One in five preferred to learn in a group (by attending a meeting, a course or a field trip). The results from this question are shown in Table 18.

Table 18: Preferred way of learning about environmental topics.

	%	N
On my own	57	(240)
In a group	21	(87)
Either way	22	(93)

Interest in Receiving Information from Extension

Another question was asked: "There are many ways the University of Wisconsin-Extension might provide you with information or help in finding out more about nature and the environment. Would you be interested in

[1]Mitchell, Robert C., 1978. "The Public Speaks Again: A New Environmental Survey." Resources, No. 60: Resources for the Future, Washington, D.C.

getting more information or help in this regard?" Forty-four percent of the people said they were interested in getting more information from Extension. Ten percent of the people said, "Depends," and the remainder of the people were not interested in receiving information from Extension. The group interested in receiving information from Extension was 84 percent of those who previously indicated they were interested in an environmental topic and wanted to know more about it.

Interest in receiving information from Extension was analyzed by the standard variables. Interest did not vary greatly with Extension district, nor with the size of the home community. Interest in receiving information did vary significantly with age, education and occupation (Table 19). This variation was predictable based on differences previously noted in the survey regarding interest in environmental topics and regarding uses for environmental information.

Preferred Methods for Receiving Information

Those people who were interested in receiving information from Extension were then asked to indicate the methods by which they preferred to receive information. After each method listed (Table 20), they were asked whether they were "very likely," "fairly likely" or "not likely" to use that method. Table 20 summarizes this information and ranks the methods from most preferred to least preferred method, based on the "very likely to use" response. Radio or television programs; articles, fact sheets and pamphlets; and displays or demonstrations were the three most preferred methods.

Table 19: Interest in information or help from Extension.[1]**

Age		N	Education		N	Occupation		N
18-24	59%	(94)	Up to 8th Grade	27%	(63)	Professional, Technical	71%	(87)
25-34	62%	(192)	Some High School	31%	(65)	Farmer	47%	(19)
35-44	59%	(102)	High School Graduate	58%	(293)	Manager	71%	(65)
45-54	66%	(96)	Some College	57%	(115)	Clerical, Sales	54%	(102)
55-64	44%	(79)	College Graduate	64%	(70)	Craft, skilled	62%	(56)
65-89	24%	(96)	Some Graduate Work	76%	(53)	Service, Transportation	57%	(54)
Statewide		(659)	Statewide		(659)	Factory	54%	(54)
						Laborer	47%	(19)
						Retired	32%	(90)
						Homemaker	41%	(83)
						Student, Unemployed	59%	(29)
						Statewide		(658)

[1] Indicates percent of people who responded that they were "interested" in receiving information from Extension, or "depends".

** A χ^2 test showed all differences to be significant at $p < .01$.

Table 20: Preferred methods of receiving information.[1]

	Very Likely To Use	Fairly Likely To Use
Radio or TV Program	31%	16%
Articles, Fact Sheets, Pamphlets	29%	22%
Displays or Demonstrations	23%	22%
Contacting a Specialist	17%	18%
Meeting, Workshop, Course or Field Trip	9%	17%
Organization or Study Group	6%	16%
Correspondence Study	3%	9%

N = (659)

[1]Indicates percentage of total survey sample.

Differences Related to Respondent Characteristics

Specific methods of receiving information were also analyzed to determine differences related to characteristics of the respondents. In addition, since many UWEX-ERU programs are group programs (meetings, workshops, field trips) the group programs were categorized into classes, field trips, combination of classes and field trips and Educational Telephone Network (ETN) classes. The results of these analyses are summarized in Tables 21-24.

People living in communities with a population of over 10,000 preferred displays, field trips and classroom sessions more than did persons in areas of less population. There were no other significant preferences based on size or location of the home community.

Preferences for delivery methods varied with age, educational level and occupation. As a group, high school graduates and persons with college

Table 21: Preferred methods of receiving information by Extension District.[1]

Methods / UW-Extension District	Radio or TV	Articles, Fact Sheet	Displays or Demonstration	Contacting a Specialist	Organization or Study Group	Correspondence Study		Group Methods: Field Trip and Class	Group Methods: Field	Group Methods: Class	Group Methods: ETN	N
Northeast	30	18	21	17	6	1		10	14	6	2	(83)
North and Central	32	29	23	23	14	3		14	9	10	4	(78)
Southeast	32	34	26	18	6	5		18	21	9	8	(262)
Southcentral	29	27	17	20	10	5		15	13	7	0.7	(144)
Southwest and West	29	24	23	15	3	3		10	8	9	1	(92)
Statewide Results	31	29	23	17	6	3		9[2]	9[2]	9[2]	9[2]	(659)

[1]Cells show percentage who would "very likely" use the method to receive information.

[2]Percentage for combined group methods.

Table 22: Preferred methods of receiving information by population of home community.[1]

Population \ Methods	Radio or TV	Articles, Fact Sheet	Displays or Demonstration*	Contacting a Specialist	Organization or Study Group	Correspondence Study		Group Methods: Field Trip and Class*	Group Methods: Field	Group Methods: Class*	Group Methods: ETN	N
Rural	27	16	13	16	3	3		8	5	5	2	(103)
1,000 - 2,500	22	21	17	14	9	2		8	6	8	2	(102)
2,500 - 9,999	30	31	15	14	3	3		8	8	3	3	(97)
10,000 - 25,000	32	27	25	12	3	2		17	15	10	3	(59)
25,000 - 49,000	42	36	35	20	9	0		21	16	16	6	(80)
50,000 - 250,000	36	32	26	24	8	3		24	20	9	8	(118)
250,000 +	28	38	32	20	8	7		17	12	8	5	(100)
Statewide Results	31	29	23	17	6	3		9[2]	9[2]	9[2]	9[2]	(659)

[1]Cells show percentage who would "very likely" use the method to receive information.

[2]Percentage for combined group methods

*A χ^2 test showed differences between population groups to be significant at $P < .05$.

Table 23: Preferred methods of receiving information by age of the respondent.[1] **

Methods / Age	Radio or TV	Articles, Fact Sheet	Displays or Demonstration	Contacting a Specialist	Organization or Study Group	Correspondence Study		Group Methods: Field Trip and Class	Group Methods: Field	Group Methods: Class	Group Methods: ETN	N
18-24	31	29	28	22	4	2		23	30	12	5	(94)
25-34	36	35	28	20	11	2		20	15	7	3	(192)
35-44	33	28	20	22	5	2		9	6	6	3	(102)
45-54	43	36	30	22	7	8		19	10	16	9	(96)
55-64	20	20	19	10	5	0		6	4	6	3	(79)
65-89	14	14	8	4	1	3		3	2	3	3	(96)
Statewide Results	31	29	23	17	6	3		9[2]	9[2]	9[2]	9[2]	659

[1]Cells indicate percentage who were "very likely" to use the method among those interested in receiving information.

[2]Percentage of combined group methods.

**A χ^2 test showed differences between age groups to be significant at $p < .01$.

Table 24: Preferred methods of receiving information by education level of the respondent.[1]

Education Level \ Methods	Radio or TV**	Articles, Fact Sheet**	Displays or Demonstration**	Contacting a Specialist **	Organization** or Study Group	Correspondence Study **		Group Methods: Field Trip and Class**	Group Methods: Field **	Group Methods: Class	Group Methods: ETN	N
Up to 8th Grade	13	13	10	3	2	0		2	0	2	0	(63)
Some High School	22	11	6	3	2	2		5	5	3	2	(65)
High School Graduate	36	31	27	2	6	4		15	11	8	6	(293)
Some College	31	34	29	19	8	3		23	20	13	4	(115)
College Graduate	36	33	21	24	4	3		19	13	13	3	(70)
Some Graduate Work	28	42	26	17	18	0		20	18	10	4	(53)
Statewide Results	31	29	23	17	6	3		9[2]	9[2]	9[2]	9[2]	659

[1]Cells indicate percentage who were "very likely" to use the method among those interested in receiving information.

[2] Percentage of combined group methods.

**A χ^2 test showed differences between education levels to be significant at $p < .01$.

Table 25: Preferred methods of receiving information by occupation of the respondent.[1]

Occupation \ Methods	Radio or TV**	Articles, Fact Sheet **	Displays or Demonstration **	Contacting a Specialist **	Organization or Study Group **	Correspondence Study **		Group Methods: Field Trip and Class**	Field **	Class	ETN **	N
Professional/Tech.	38	48	34	20	11	0		29	20	13	2	(87)
Farmer	26	52	11	11	5	5		11	5	11	5	(19)
Manager	35	28	28	28	18	5		12	12	11	6	(65)
Clerical, Sales	28	30	21	14	4	3		11	12	7	4	(102)
Crafts	39	34	30	25	4	4		23	14	9	9	(56)
Service	46	30	30	33	11	0		19	17	9	9	(54)
Factory	22	22	22	15	6	8		7	11	4	4	(54)
Labor	32	5	11	5	0	0		16	11	5	5	(19)
Retired	20	18	10	7	2	3		6	2	6	2	(90)
Homemaker	22	24	14	11	1	4		7	4	6	1	(83)
Student/Unemployed	34	41	38	28	3	0		31	31	14	0	(29)
Statewide Results	31	29	23	17	6	3		9[2]	9[2]	9[2]	9[2]	658

[1]Cells indicate percentage who were "very likely" to use the method among those interested in receiving information.

[2]Percentage of combined group methods.

**A χ^2 test showed differences between occupations to be significant at $p < .01$.

educational experience were more likely to use all methods than were persons with less than a high school education. The highest education level (some graduate work) much preferred written information (articles, fact sheets) to radio or television. They were also the group which indicated the most interest in organization or group study. College graduates were the group most likely to contact a specialist. People with some college education preferred field trips or field trips with classroom work more than did any other group. People with less than a high school education preferred radio and television.

Overall, the 40-54 age group had the strongest interest in the most methods, except for study groups, field trips and field trip-class combinations. The young were most interested in these methods.

Professional-technical people, farmers, clerical-sales people, homemakers and students all showed a preference for articles and fact sheets rather than radio or TV. Professional-technical people and students were more interested than other groups in field trips, classes or combinations of the two. Farmers were not particularly interested in contacting a specialist for information on nature or environmental topics. This was curious, as they may be familiar with contacting specialists on agriculture-related topics. Correspondence study and ETN were not popular methods of study with any subgroup.

Focus on the Subpopulation Interested in Receiving Information from Extension

Further analysis was directed at the population which would like to receive information or help from Extension (Yes or depends, N = 357). The objective was to determine if their preference for method of receiving

environmental information differed from that of the whole sample. In addition, when analyzing specific group methods only the subpopulation which was interested in receiving information from Extension and interested ("very likely" or "fairly likely") in group methods was analyzed (N = 168).

As might be expected, this group of people tended to be more homogeneous than the population as a whole and much of the significant or highly significant differences related to age, education, etc. dropped out (Tables 26 - 30). Some of the changes were quite dramatic. For example, although there is low interest in receiving information from Extension and in group methods by elderly or retired people, those that are interested are very interested in field trip and classroom experience and they are the group most interested in ETN (Table 28).

On the practical side, it should be remembered that the "focus" data has to be interpreted very carefully. For programming purposes, it may be useful to know that retired persons who want to receive more information by group methods are interested in a field trip - classroom experience. This group is, however, a very small percentage of the retired population, and it may be hard to identify them for programming purposes. On the other hand, if a programmer is invited by a group of retired persons to put on an environmental program, a field trip - classroom combination might be a wise choice because the two selective criteria have been met. Interest in knowing more about environmental topics is presumed or the programmer wouldn't be invited and they are meeting in a group.

Table 26: Preferred methods of receiving information, of those who want to know more, by Extension District.

Methods / Extension District	Radio or TV*[1]	Articles, Fact Sheet[1]	Displays or Demonstration**[1]	Contacting a Specialist**[1]	Organization or Study Group*[1]	Correspondence Study[1]	N	Group Methods[2]				
								Field Trip and Class	Field*	Class	ETN*	N
Northeast	64	38	46	36	13	3	(146)	36	55	23	10	(74)
North and Central	60	55	43	26	7	4	(77)	50	32	36	14	(35)
Southeast	57	61	47	32	12	8	(53)	64	43	31	27	(15)
Southcentral	53	51	32	38	19	1	(39)	60	54	29	3	(22)
Southwest and West	51	42	40	26	6	6	(42)	60	47	53	6	(22)
							(357)					(168)

[1]Cells indicate percentage who were "very likely" to use the method among those interested in receiving information from Extension.

[2]Cells indicate percentage who were "very likely" to use a group method among those interested in receiving information from Extension.

*A χ^2 test showed differences between districts to be significant at $p < .05$.

**A χ^2 test showed differences between districts to be significant at $p < .01$.

Table 27: Preferred method of receiving information, of those who want to know more, by population of home community.

Population \ Methods	Radio or TV*[1]	Articles, Fact Sheet*[1]	Displays or Demonstration**[1]	Contacting a Specialist[1]	Organization or Study Group[1]	Correspondence Study[1]	N	Group Methods[2]				N
								Field Trip and Class**	Field	Class	ETN	
Rural	56	32	26	32	6	6	(50)	47	29	29	12	(17)
Cities and Villages Under 2,500	45	43	35	29	20	4	(49)	44	33	44	11	(18)
2,500-9,999	56	58	29	27	6	6	(52)	36	36	14	9	(22)
10,000-25,000	61	52	48	23	6	3	(31)	63	56	38	13	(16)
25,000-49,000	74	63	61	35	15	0	(46)	81	62	62	24	(21)
50,000-250,000	58	53	43	39	13	4	(72)	62	53	21	20	(45)
250,000 +	49	67	56	35	14	12	(57)	59	41	28	17	(29)
							(357)					(168)

[1]Cells indicate percentage who were "very likely" to use the method among those interested in receiving information from Extension.

[2]Cells indicate percentage who were "very likely" to use a group method among those interested in receiving information from Extension.

*A χ^2 test showed differences between population groups to be significant at $p < .05$.

**A χ^2 test showed differences between population groups to be significant at $p < .01$.

Table 28: Preferred method of receiving information, of those who want to know more, by age of respondent.

Age \ Methods	Radio or TV[1]	Articles, Fact Sheet[1]	Displays or Demonstration*[1]	Contacting a Specialist[1]	Organization or Study Group*[1]	Correspondence Study**	N	Group Methods[2]: Field Trip and Class*	Field**	Class	ETN	N
18-24	52	48	46	38	7	4	(56)	58	74	29	13	(38)
25-34	58	47	44	32	18	3	(120)	61	44	22	8	(64)
35-44	57	48	33	37	8	3	(60)	41	27	27	14	(22)
45-54	65	56	46	33	11	13	(63)	60	33	50	30	(30)
55-64	46	46	43	23	11	0	(35)	50	30	50	20	(10)
65-89	59	59	32	18	5	14	(22)	75	50	75	75	(4)
							(357)					(168)

[1]Cells indicate percentage who were "very likely" to use the method among those interested in receiving information from Extension.

[2]Cells indicate percentage who were "very likely" to use a group method among those interested in receiving information from Extension.

*A χ^2 test showed differences between age groups to be significant at $p < .05$.

**A χ^2 test showed differences between age groups to be significant at $p < .01$.

Table 29: Preferred method of receiving information, of those wno want to know more, by education level of respondent.

Methods / Education Level	Radio or TV* [1]	Articles, Fact Sheet [1]	Displays or Demonstration** [1]	Contacting a Specialist** [1]	Organizationl or Study Group* [1]	Correspondence Study [1]	N	Group Methods [2] Field Trip and Class	Field*	Class	ETN	N
Up to 8th Grade	47	47	35	12	6	0	(17)	33	0	33	0	(3)
Some High School	70	35	20	5	5	5	(20)	30	30	20	10	(10)
High School Graduate	61	53	46	32	11	7	(171)	53	41	27	21	(81)
Some College	55	60	52	43	14	6	(65)	74	66	43	14	(35)
College Graduate	56	51	33	27	7	4	(45)	57	39	39	9	(23)
Some Graduate Work	37	55	34	45	24	0	(38)	63	56	31	12	(16)
							(357)					(168)

[1]Cells indicate percentage who were "very likely" to use the method among those interested in receiving information from Extension.

[2]Cells indicate percentage who were "very likely" to use a group method among those interested in receiving information from Extension

*A χ^2 test showed differences between education levels to be significant at $p < .05$.

**A χ^2 test showed differences between education levels to be significant at $p < .01$.

Table 30: Preferred method of receiving information, of those who want to know more, by occupation of respondent

Occupation \ Methods	Radio or TV*[1]	Articles, Fact Sheet*	Displays or Demonstration	Contacting a Specialist*	Organization or Study Group	Correspondence Study	N	Group Methods[2] Field Trip and Class*	Field	Class	ETN	N
Professional/Tech.	53	68	48	27	16	0	(62)	69	47	31	5	(36)
Farmer	56	11	22	23	11	11	(9)	40	20	40	20	(5)
Manager	50	39	39	39	26	7	(46)	50	50	44	25	(16)
Clerical, Sales	53	56	40	25	7	3	(55)	44	48	28	16	(25)
Craftsman	63	54	48	40	6	2	(35)	72	44	28	28	(18)
Service	81	52	52	58	19	0	(31)	50	45	25	25	(20)
Factory	41	41	41	28	10	14	(29)	27	40	13	13	(15)
Labor	67	11	22	11	0	0	(9)	50	33	17	17	(6)
Retired	62	55	31	21	7	10	(29)	100	40	100	40	(5)
Homemaker	53	59	35	26	3	9	(34)	55	27	45	9	(11)
Student/Unemployed	59	71	67	47	6	0	(17)	82	82	36	0	(11)
							(357)					(168)

[1]Cells indicate percentage who were "very likely" to use the method among those interested in receiving information from Extension.

[2]Cells indicate percentage who were "very likely" to use a group method among those interested in receiving information from Extension.

*A χ^2 test showed differences between occupations to be significant at $p < .05$.

**A χ^2 test showed differences between occupations to be significant at $p < .01$.

Focus on Persons Interested in Group Methods

The 168 people which indicated an interest in group study methods (either "very likely" or "fairly likely" to use) were further questioned to determine time and session preferences, distance they would travel to meetings, and amount they were willing to pay if a fee were charged for the program.

Most persons preferred programs on week days with Tuesday and Wednesday being mentioned most often. On the other hand, 72 percent of the people preferred weekends for field trip programs. Evening programs were much preferred over daytime, but there was no strong preference for a particular season of the year (Table 31).

A series of sessions versus a single session was preferred by most people. But few people wanted more than six sessions (Table 32).

Most people would travel more than ten miles, one-way, to attend a class session, but few would travel more than 50 miles. Generally speaking, people would travel farther to attend a field trip session than they would travel for a classroom session (Table 33). Nearly one-quarter of the people would travel more than 100 miles, one-way, for a field trip.

Few people were willing to pay more than $25 for a two-hour session of instruction, but more than one-third of the people were willing to pay between $11 and $25. Some people would be willing to pay $60 for a single, full-day session (Table 34), but most are not willing to pay that much.

Table 31: Preferences for Timing of Group Activities[1]

Preferred day(s) of the week for a class[2] (N = 168)

Sunday	4%	Thursday	17%
Monday	22%	Friday	11%
Tuesday	31%	Saturday	14%
Wednesday	27%		

Preferred time of week for a field trip (N = 168)

Weekday	25%
Weekend	72%
Don't Care	3%

Preferred time of day for a meeting or workshop (N = 168)

Morning	24%	Evening	13%
Afternoon	13%	Don't Care	5%

Preferred season for a meeting or field trip (N = 168)

Winter	42%	Summer	41%
Spring	49%	Fall	50%

[1]Indicates the percentage of the subpopulation which is interested in receiving information from Extension and which is interested in group methods.

[2]People could respond to more than one choice.

Table 32: Preferred Number of Sessions for A Group Activity[1]

Preference for a one-session program or a program with a series of sessions? (N = 168)

One session	37%
A series of sessions	59%
No preference	3.5%

Number of sessions preferred? (N = 106)

2 sessions	37%	6 sessions	9.6%
3 sessions	1.8%	7-10 sessions	6%
4 sessions	12%	More than 10	3.6%
5 sessions	11.4%	Don't know	11%

[1]Indicates the percentage of the subpopulation which is interested in receiving information from Extension and which is interested in group methods.

Table 33: The Distance People Are Willing to Travel -- One Way -- To Attend A Group Activity[1]

Miles	Meeting or Workshop	Field Trip
0-10	17%	6%
11-20	22%	6%
21-30	13%	14%
31-40	7%	7%
41-50	9%	18%
51-100	19%	20%
100+	8%	23%
Don't know	6%	5%

(N = 168)

[1]Indicates the percentage of the subpopulation which is interested in receiving information from Extension and which is interested in group methods.

Table 34: The Price People Are Willing to Pay to Attend a Group Activity[1]

Maximum Amount	One Two-Hour Session	One Full-Day Session
Nothing	2%	1%
$ 1-5	17%	4%
$ 6-10	22%	11%
$11-15	7%	4%
$16-20	16%	13%
$21-25	11%	13%
$26-58	2%	29%
$59 or more	2%	5%
Don't know	21%	21%
(N = 168)		

[1]Indicates the percentage of the subpopulation which is interested in receiving information from Extension and which is interested in group methods.

APPLICATIONS TO PROGRAMMING

Programming Models

An end product of the Environmental Education Needs Assessment is a working tool for persons programming in the environmental education area. The need for environmental information, at least as it is expressed as interest in environmental topics, was established early in the survey.

There are four general programming models where the data in this report could be useful. The four models are:

1. Starting a general environmental education program;
2. Broadening the current base of an established program;
3. Working with specific groups; and
4. Providing information which will help solve community environmental problems.

Most of the following discussion is based on the assumption that the population to educate is large and resources are limited; therefore, work should be aimed at high probability targets.

Starting a General Environmental Education Program

Let us assume you have just been hired to provide environmental education. There are several things to keep in mind. First, interest is not restricted geographically. Rural, northern Wisconsin audiences and urban, southern Wisconsin audiences showed a similar interest in environmental topics.

Secondly, interest in general, in specific topics, and uses for environmental information did vary by age, occupation and education level.

Programmers should concentrate their efforts with high probability audiences, using high probability methods on high interest topics. Your initial challenge will be to determine the high probability audience(s) for your area. The best determinate of high probability audiences appears to be occupation. Although general interest in environmental topics doesn't vary geographically in the state, interest does vary by occupation. There may be a high population of farmers, retired persons, laborers, factory workers, etc., in your community. You will have to ascertain this information for your area. Your techniques may be formal or informal.

You may find that your community has a significant number of professionals which also means they have a high education level. This group is interested and has use for environmental information. You can work through the tables to determine what topics your audience(s) are interested in, what uses they are likely to have for information and how they want the information presented.

Energy sources, for example, is a topic of interest for professionals. They want information primarily for recreational or hobby pursuits and they prefer that information be presented in the form of articles or fact sheets. Perhaps a fact sheet or bulletin on the relationship of energy sources to recreational pursuits (e.g., relation of wood harvesting to wildlife) would be a good way of attracting interest to your programs and providing information to a significant portion of your community.

Another tactic is to program in areas that are of high interest to many groups. Saving home energy is an example of a popular and timely topic.

Even though the percentage of the population which is interested in a topic, has use for a topic, or wants information by a given method is low, enough people might be interested to offer a viable program. For instance, only 20 percent of professional-technical people were interested in field trips as a method of learning. However, this may be more than enough people to fill a canoe trip which surveys local water quality.

The fact that people will pay to attend programs is also important. This additional resource may allow greater programming flexibility.

Broadening Current Programs

Current programs can be broadened by seeking out more specialized groups, topics, use, or delivery methods. The easiest way, of course, is to look for one factor that needs changing at a time. For instance, professional-technical people and farmers were both interested in water quality and they both prefer information provided in written form. The major difference is farmers are more interested in information for work related purposes and professional-technical people are interested in information for recreation or home uses. To do a fact sheet for one group you have to gather information and write the material. With only slight additional effort, the other group could also be reached with a slant appropriate to their use.

Working with Special Groups

How might you use the survey information to reach a special group? First, you should use the analyses in this report that focus information. If a group approaches you, the criteria of interest in the environment and wanting to know more have been met. From there, the appropriate tables can be consulted.

Retired people, for instance, in general, aren't as interested in environmental topics as other groups. Those that are interested are interested in gardening, trash disposal and saving home energy. A program on mulching for better gardens, for example, could integrate these three topics. The topic would relate to their hobby or recreational pursuit (gardening). If a group approached you, a group method such as a classroom session and field trip is appropriate.

Solving Community Environmental Problems

The efficiency of providing general environmental information about specific community problems can also be enhanced by consulting the tables provided in this report. Here, topical interest tables should be consulted first. Perhaps there is a problem with water quality in your community. The "Topic of Interest by Occupation" table indicates that laborers are a group that are highly interested in water quality. They like their information presented via radio or television and they want information for a hobby or recreational pursuit. A local TV or radio program on the influence of water quality on swimming or fishing may fit these informational needs.

As you can see, the possible combinations of information are nearly infinite. The information contained in this report should be a valuable tool for assisting programmers.

SUMMARY AND DISCUSSION

Who is Interested and Wants to Learn?

The Wisconsin adult population is very interested in nature and the environment. Eight-one percent of all persons interviewed were very interested in at least one nature topic. Eighty-seven percent were very interested in at least one environmental quality/management topic. Ninety-nine percent of the total survey population were somewhat interested in at least one topic.

Not only are Wisconsin adults interested in topics, they want to know more about the topics which interest them. Sixty-four percent indicated they would like to know more about topics which interested them.

It appears that in Wisconsin, contrary to the belief of the popular press, interest in the environment has continued unabated. It was also found that interest in the environment did not vary significantly with the size of the home community or the geographic location in the state. These findings refute many popular misconceptions that interest in the environment is only an urban phenomenon or a southern Wisconsin phenomenon.

Interest in knowing more about environmental topics did vary with age, occupation and education. Levels of interest ranged from a low of 41 percent for retired persons to a high of 84 percent for laborers. Along with laborers, students and unemployed showed the highest interest, followed closely by professional-technical persons and managers.

Two-thirds to three-quarters of young and middle-aged persons were interested in knowing more about environmental topics. Learning interest dropped off sharply at age 55 and declined even further in the 65-89 age bracket.

The strongest interest in learning was registered by those who had some college education or were college graduates (76 percent). The most significant difference existed between those with high school diplomas (66 percent) and those with some high school education (48 percent).

These statistics are all significant for planning purposes because, not only does Wisconsin have a high percentage of people interested in environmental topics, but the percentage of the population is likely to grow in the near future as the population becomes more educated and the post World War II baby boom approaches middle-age.

How Strong is Their Interest?

Not only are people interested in the environment, they are strongly interested in it. Participants in the survey were asked: "Considering all the subjects you're interested in, how would your interest in nature and the environment rank on a scale from one to five where five is your strongest interest and one is your weakest interest?" Eighty-one percent ranked their interest at three or stronger. Forty-two percent ranked their interest as strong (4) or very strong (5).

When the variety and complexity of learning opportunities are considered, this information is very significant. It shows that interest in environmental topics is probably not just a passing fad. Structure and plans for long-ranged environmental education programming can be made without great concern about the whims of an ephemeral audience.

What Are They Interested In?

By far the strongest interest in any topic was saving home energy. Seventy-six percent of the respondents indicated they were very interested in this topic. This was followed in order by water quality, energy sources and flowers, plants and trees, all with more than 50 percent of the respondents very interested. Of lowest interest were weather patterns or climate (31 percent), stars or planets (22 percent) and rocks or soils (14 percent). This information is interesting because it contrasts with some programming experience in the Environmental Resources Unit, where topics dealing with natural history seem to be more popular than those dealing with resource management or environmental quality.

Although general interest in environmental topics is strong, interest in specific topics is likely to wax and wane in the future. The challenge for future planning will be to provide enough flexibility in an environmental program to provide educational opportunities for changing topical interests. This study showed that occupation is the single most important variable to consider when predicting topics in which people will be interested.

Age and education are also important characteristics to consider when determining topical interests of people. Persons in the middle-age groups (25-54) and persons with some college training or a college degree showed the most interest in the largest number of topics. Retired persons showed the lowest interest.

How Will They Use the Environmental Information?

Survey participants were asked if they would have a use for nature or environmental information in their work, in a nature hobby or recreational activity, in an organization or group they belong to, for their home, and/or in trying to solve community environmental problems.

Seventy-eight percent of the respondents indicated they had at least one use for environmental information. This is 14 percent more than indicated a desire to learn about the environment. Presumably the difference is made up of persons who feel they already have adequate information which they use or intend to use in a variety of ways.

Nearly 60 percent of all respondents indicated they would use information in a nature hobby or recreational activity. Only 13 percent would use it in an organization or group. Remaining results were: in your home, 47 percent; to solve community problems, 31 percent; in your work, 26 percent. Uses for environmental information, unlike topics of interest, did vary by geographic location and size of home community. They also varied by age, education, and occupation. A professional/technical or managerial person aged 25-54 with a college degree would be most likely to use environmental information, and would probably use it most often in a nature hobby or recreational activity. Retired persons with low educational levels had the least use for environmental information.

From this data, it appears that people are somewhat "self-centered," when it comes to uses of environmental information. That is, they want information primarily for personal uses. The fact that people want information primarily for leisure time activities and the fact that leisure time is increasing indicates that in the future there will be a greater demand for environmental information.

Through What Media Do They Currently Receive Environmental Information?

Survey participants were asked how they currently acquire environmental information. Methods in which the participant had a great deal of discretion about using the method and discretion about the time and location of use were the most popular. Television and radio are used very to fairly often by 49 percent of the participants. Reading articles is used very to fairly often by 47 percent and books are used very to fairly often by 21 percent. In the last year, almost 60 percent had visited a nature center or wildlife area, a zoo or botanical garden, but only 26 percent had participated in a community project and only 11 percent had attended a course, workshop or field trip.

Through What Media Would They Prefer Information in the Future?

Most respondents (about 90 percent) could not recall having problems getting information about the environment, but more than half indicated that they were interested in receiving information or help from UW-Extension for learning about nature and the environment (44 percent yes, 10 percent depends). More than half the people preferred to learn on their own.

When persons who were interested in receiving information from Extension were asked how they preferred to receive environmental information, 51 percent indicated they were very or fairly likely to use articles, fact sheets or pamphlets; 47 percent indicated radio or television; 45 percent indicated displays or demonstrations; and 26 percent indicated meeting, workshop or field trip. Thus, the projected use of written and broadcast media is quite similar to current uses and probably reflects the preferences of people to learn on their own. The projected use of such casual learning

tools as displays is significantly lower than current use of display activities, such as visiting a zoo or nature center. The reason for this is not obvious. Perhaps people do not plan a visit to a display as a learning activity but think of it as recreation. Projected use of more structured methods like courses or meetings increases by more than double.

For education about the environment, it appears that media presentations, such as written material or television, where the student can learn independently is an important part of a program. It also appears that more people are interested in taking classes than actually do. The reason for this was not ascertained but it does open a pathway for further investigation.

Among occupation groups, persons in service occupations were most likely to use radio or television, farmers and professionals were most likely to use articles and fact sheets, and students/unemployed and professionals were most likely to use classes and field trips. Retired persons, homemakers and factory workers were less likely to use all methods of receiving information with radio and television and fact sheets ranking only somewhat higher than other methods. Persons over 55 and/or with less than high school diploma were least likely to use all forms of receiving information. Persons with a high school diploma or college experience showed highest interest in both radio and television and articles and fact sheets, with no significant or consistent variations between the two uses. Only those who had some graduate school showed a marked preference for written over broadcast media. The reasons for the preferences shown here are not entirely clear, but media preference is an important aspect of targeting information for audiences.

IMPLICATIONS

The results of this needs assessment clearly indicate that concern for the environment is an important and integral part of many people's lives. Providing environmental information should continue to be a high priority for the University of Wisconsin-Extension. There is definitely an interested and potentially growing audience around the state for environmental programming.

Using the information in this report, Extension and other organizations concerned with continuing environmental education for adults can be more specific in targeting kinds of environmental information to potential users. Interest in environmental topics, uses of information and preferred methods of receiving information varies with age, education, and occupation. These are the population characteristics which should be considered when developing programs. Location in the state and the size of the home community are not nearly as important characteristics.

It remains for Extension to review internally the proportion of effort and resources devoted to programming based on the preferences of various groups with different sets of population characteristics (age, education, etc.). This may be particularly true when considering the media respondents currently use, the media they prefer to use and the way material is presented by Extension.

With respect to media, the study did not investigate the possibilities of using different kinds of media for different types of environmental information. For instance, certain media may be best for "awareness" education and

others may be best for "action" education. This could be a fruitful area to pursue further.

General ways for increasing the effectiveness of environmental programming are discussed in this report. The challenge is to Extension programmers and others to blend the information in this report with practical experience to meet adult environmental education needs in the state with high quality, effective programs.

APPENDIX A -- INTERVIEW SCHEDULE

_____Office Number
Project 1159
December, 1978

University of Wisconsin-Extension
Wisconsin Survey Research Laboratory

Statewide Survey of Environmental
Education Interests and Needs

Before we begin, I want to assure you that all of the information you give us is confidential, and that none of it will be released in any way that would permit identification of you or your family. We don't even want to know your name. Your participation, of course, is voluntary.

1. To begin with, I'll read a number of topics about nature. For each one, please tell me if you are very interested, somewhat interested, or not interested in it. First, how interested are you in...

	Interest		
	Very	Some	Not
A. bird or animal life?	____	____	____
B. flowers, plants, or trees?	____	____	____
C. fish or other water life?.	____	____	____
D. rocks or soils?.	____	____	____
E. weather patterns or climate?	____	____	____
F. stars or planets?.	____	____	____

2. And, how interested are you in natural areas such as...

	Interest		
	Very	Some	Not
A. wetlands, prairies, forests, or lakes? . . .	____	____	____
B. special places like the Baraboo Hills, Apostle Islands, Lake Michigan, and so forth?	____	____	____
C. gardening or natural landscaping?.	____	____	____
D. backpacking, canoeing, camping, fishing, or hunting?	____	____	____

Interviewer: _____ Int. No.: _____

Date: _____ Time Started: _____

3. How interested are you in natural resource management and environmental quality? Things like...

	Interest		
	Very	Some	Not
A. forestry?	____	____	____
B. wildlife management?	____	____	____
C. management of lakes and coastlines?	____	____	____
D. land use planning?	____	____	____
E. water quality?	____	____	____
F. pesticides and weed killers?	____	____	____
G. trash and sewage disposal?	____	____	____
H. energy sources, nuclear, coal, solar, and so forth?	____	____	____
I. saving home energy?	____	____	____

4. Are there any additional nature, environment, or outdoor recreation topics that you are interested in?

/Yes/ /No/ (TO Q 5)

4a. What are they? _____

_____

_____

5. INTERVIEWER: IS AT LEAST ONE TOPIC CHECKED "VERY" OR "SOMEWHAT" IN Q'S 1, 2, OR 3, OR IS "YES" CHECKED IN Q 4?

/Yes/ /No/ (TO Q 6)

5a. Would you like to know more about any of those topics you indicated an interest in?

/Yes/ /No/ (TO Q 6) /Don't know/ (TO Q 6)

5b. Which way would you prefer to learn more about these topics, on your own by reading, watching TV, asking someone, or in a group by attending a meeting, a course, or a field trip?

/Own/ /Group/ /Either/

6. Now, could you tell me if you have a use for nature or environmental information in any of the ways I'll name. First:

A. in your work? /Yes/ → 6a. What kind of nature or environmental information could you use here? _____

/No/

B. in a nature hobby or other recreational activity? /Yes/ → 6b. What kind of nature or environmental information could you use here? _____

/No/

C. in an organization or group you are in? /Yes/ → 6c. What kind of nature or environmental information could you use here? _____

/No/

D. for your home? /Yes/ → 6d. What kind of nature or environmental information could you use here? _____

/No/

E. in trying to solve community environmental problems? /Yes/ → 6e. What kind of nature or environmental information could you use here? _____

/No/

7. Do you belong to any organizations or groups that have an interest in nature and the environment?

/Yes/ /No/ (TO Q 8)

7a. What are the names of these groups and, for each one, would you classify yourself as active or not active?

GROUP	Active	Not Active
_____	_____	_____
_____	_____	_____
_____	_____	_____

8. How often do you read articles about nature and the environment...would it be never, occasionally, fairly often, or very often?

/Never/ /Occasionally/ /Fairly/ /Very/

9. How often do you read books about nature and the environment?

/Never/ /Occasionally/ /Fairly/ /Very/

10. And, how often do you watch TV or listen to radio programs about nature and the environment?

/Never/ /Occasionally/ /Fairly/ /Very/

11. Over the last year, have you visited a nature center or wildlife area?

/Yes/ /No/

12. Visited a zoo or botanical garden? /Yes/ /No/

13. Participated in a community environmental project such as a clean-up or recycling project?

/Yes/ /No/

14. Over the last year, have you taken a course, workshop, or field trip concerned with nature or the environment?

/Yes/ /No/ (TO Q 15)

14a. What organization offered this (most recent) course, workshop, or field trip?

_____

14b. What was it about? _____

14c. What was the fee? $_____

14d. How long did it last? _____

14e. Overall, would you rate this activity as excellent, very good, good, fair, or poor?

/Excellent/ /Very good/ /Good/ /Fair/ /Poor/

14f. What did you particularly like about it? _____

_____

14g. How have you used what you learned from it? _____

_____

15. As you see it, are you having any problems in getting all the information on nature and the environment that you may want?

/Yes, problems/ /No, no problems/ (TO Q 16)

15a. What kinds of problems do you have in getting this information?

_____

_____

16. There are many ways the University of Wisconsin-Extension might provide you with information or help in finding out more about nature and the environment. Would you be interested in getting more information or help in this regard?

/Yes/ /Depends/ /No/ (SKIP TO Q 29, PAGE 7)

17. I'll read a list of ways that people might get information about nature and the environment. For each one, please tell me if you are very likely to use it, fairly likely, or not likely. First:

	Likely		
	Very	Fairly	Not
A. by reading articles, fact sheets, or pamphlets? . .	____	____	____
B. radio or TV programs?	____	____	____
C. correspondence course?	____	____	____
D. belonging to an organization or study group?	____	____	____
E. talking with or calling a specialist who can answer questions?	____	____	____
F. looking at displays or demonstrations?	____	____	____

18. And how likely are you to get information about nature and the environment by attending meetings, workshops, courses, or field trips?

/Very likely/ (TO Q 19) /Fairly likely/ (TO Q 19) /Not likely/ (SKIP TO Q 29, PAGE 7)

19. If you attended meetings, workshops, courses, or field trips to learn about nature and the environment, would you prefer a one-session program, or a program with a series of sessions?

/One/ (TO Q 20) /Series/ /No preference/

19a. How many sessions would be best for you? _____(#)

20. Would you like these meetings or field trips to be held in the winter, spring, summer, or fall? (CHECK ALL THAT APPLY)

/Winter/ /Spring/ /Summer/ /Fall/

21. If you attended a meeting or workshop, would you prefer to have it in the morning, the afternoon, or the evening?

/Morning/ /Afternoon/ /Evening/ /Don't care/

22. What day of the week would you prefer? _____

23. If you attended a field trip, would you prefer to have it on a weekday or weekend?

/Weekday/ /Weekend/ /Don't care/

24. How many miles from your home--one way--is the farthest you would be willing to travel to attend a meeting or workshop?

_____(# MILES) /Don't know/

25. How many miles from your home--one way--is the farthest you would be willing to travel to attend a field trip?

_____(# MILES) /Don't know/

26. Suppose UW-Extension offered a group activity that you wanted to take with a qualified instructor. What is the most you would be willing to pay for one two-hour session?

$_____ /Don't know/

27. What is the most you would be willing to pay for one session that went one full day?

$_____ /Don't know/

28. Extension can offer several types of group sessions. For each type I'll name, please tell me if you would be very likely to participate in it, fairly likely, or not likely. First:

	Likely		
	Very	Fairly	Not
A. a field trip?	____	____	____
B. a classroom meeting?.	____	____	____
C. a combination of field trips and classroom meetings?	____	____	____
D. a meeting at a location where the instructor's voice is heard by telephone and you can also talk to the instructor?	____	____	____

ALL RESPONDENTS

29. In general, how important do you feel it is that UW-Extension provide information on nature and the environment to citizens of Wisconsin... is this very important, somewhat important, or not important?

/Very/ /Somewhat/ /Not/ (TO Q 30) /Don't know/ (TO Q 30)

29a. How should Extension's programs on nature and the environment be paid for...by public tax money with no charge to those who take the programs, solely through fees paid by those who take the programs, or by a combination of taxes and fees?

/Taxes/ /Fees/ /Combination/ /Don't know/

30. Now I'd like to ask a few questions about your contact with University of Wisconsin-Extension through your county Extension office, county Extension agents, or other University Extension faculty. During the past two years, have you gotten information from any Extension source on any subject through...

	Yes	No
A. attending an Extension meeting, workshop, conference, or non-credit course?	____	____
B. attending a major Extension event like Farm Progress Days, College Week, or a Learn In?	____	____
C. calling, writing, or visiting with an Extension agent or specialist?	____	____
D. watching state public TV?	____	____
E. listening to state educational radio?	____	____
F. reading something from Extension in a local paper, or hearing an Extension agent on a local radio or TV station?	____	____
G. taking a correspondence course from the University of Wisconsin?	____	____
H. Extension Homemaker Club?	____	____
I. 4-H?	____	____
J. reading an Extension fact sheet or bulletin?	____	____ (TO Q K)

Ja. How did you get it? _____

K. any other contact with Extension?	____	____

31. INTERVIEWER: IS ANY "YES" CHECKED ABOVE?

/Yes/ /No/ (TO Q 32)

31a. What problems or topics did you get any information or help on from UW-Extension?

/Can't remember/, or _____

_____

_____

32. Considering all the subjects you're interested in, how would your interest in nature and the environment rank on a scale from one to five where five is your strongest interest and one is your weakest interest?

/1/ (GO TO Q 33) /2/ /3/ /4/ /5/ /Don't know/ (TO Q 33)

32a. Do you work as a volunteer teaching others about nature and the environment?

/Yes/ (TO Q 33) /No/

32b. Do you have any interest in voluntarily teaching others about nature and the environment?

/Yes/ /No/

33. Only a few background questions remain...first, what is your present age?

_____(AGE)

34. What is the highest grade of school or year of college you finished?

_____(GRADE OF SCHOOL), or _____(YEAR OF COLLEGE)
(TO Q 35)

34a. What is the highest college degree--if any--you earned?

/None/, or _____(DEGREE)

35. How many children under 18 years of age live there? _____(#)

36. Including yourself, how many persons 18 or older live there? _____(#)

37. How many years have you lived in Wisconsin? /All life/, or _____(# YEARS)

38. What is the name of the city, village, or town or township in which you now live?

_____, _____, _____
(CITY) (VILLAGE) (TOWN OR TOWNSHIP)

39. How many years have you lived in (CITY, VILLAGE, TOWN OR TOWNSHIP IN Q 38)?

/All life/, or _____(# YEARS)

40. In what county do you live? _____(COUNTY)

41. Are you presently working full time, part time, retired, a homemaker, a student, or what?

/Full/ /Part/ /Retired/ (TO Q 42) /Homemaker/ (TO Q 42) /Student/ (TO Q 42) Other: _____ (TO Q 42)

41a. What is your job title and duties?

_____ (TITLE), _____ (DUTIES)

42. Are you married, separated, widowed, divorced, or have you never married?

/Married/ /Separated/ (TO Q 43) /Widowed/ (TO Q 43) /Divorced/ (TO Q 43) /Never married/ (TO Q 43)

42a. What is your spouse's occupation?

/Not employed/, or _____ (JOB TITLE), _____ (DUTIES)

43. In 1978 was your total family income less than $5,000; between 5 and $10,000; 10 to $15,000; 15 to $20,000; 20 to $25,000; 25 to $30,000; 30 to $35,000; 35 to $40,000; or over $40,000?

/Less than/ / $5,000 / /$5,000-/ / $9,999/ /$10,000-/ / $14,999/ /$15,000-/ / $19,999/ /$20,000-/ / $24,999/

/$25,000-/ / $29,999/ /$30,000-/ / $34,999/ /$35,000-/ / $39,999/ /$40,000/ /or over/

********** TERMINATE INTERVIEW **********

Time Interview Ended: _____

Sex of Respondent: /Male/ /Female/

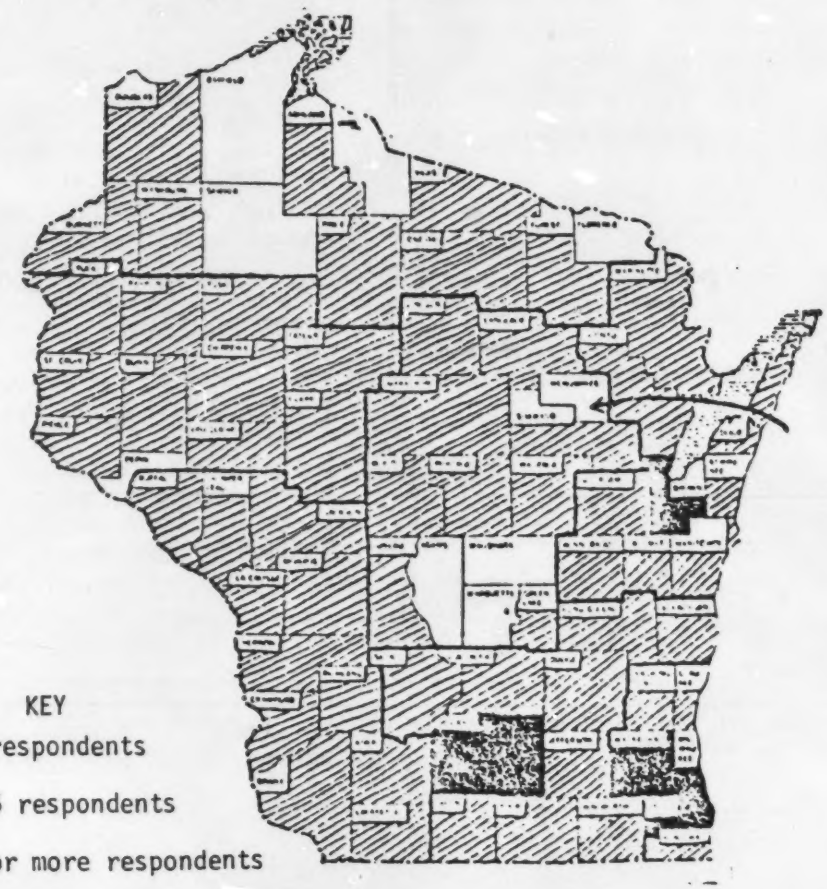
COMMENTS: _____

APPENDIX B -- OCCUPATION CLASSIFICATIONS

Category	Representative Occupation Groups
Professional--Technical	Accountant, Architect, Dentist, Engineer, Lawyer, Clergyman, Doctor, Nurse, Teacher, Professor, Technician, Scientist, Artist, Airline Pilot, Computer Programmer
Farmer	Own and operate farm
Manager, official	Business Owner, Business Executive, Public Official
Clerical, Sales	Bookkeeper, Receptionist, Secretary, Cashier, Stock Clerk, Computer Operator, Teacher's Aide, Keypunch Operator, Salesman, Saleswoman
Crafts, skilled	Carpenter, Brickmason, Machinist, Mechanic, Plumber, Electrician
Service, Transportation	Truck Driver, Bus Driver, Taxi Driver Fireman, Policeman, Practical Nurse, Protective Service Worker, Food Service Worker, Cook, Waitress, Cosmetologist, Maid, Servant
Factory, semi-skilled	Apprentice Craftsmen, Factory Operative, Assembly Line Worker, Meat Cutter, Factory Sewer and Stitcher, Laundry Worker
Laborer, unskilled	Farm Laborers, Helpers, Construction Worker, Longshoremen, Stock Handler, Warehouseman, Garbage Collector
Retired	
Homemaker	
Student, Unemployed	

APPENDIX C
CHARACTERISTICS OF SURVEY GROUP

This section outlines the characteristics of those surveyed. Comparison to data from U.S. Census studies gives further indication that the sample is representative of adults in Wisconsin. Due to differences in bases of data,[1] [2] the comparisons are not exact and should be considered in a general sense.


UWEX Northern District (25) 4%
UWEX Northeast District (83) 12%
UWEX Western District (44) 6%
UWEX Central District (53) 8%
UWEX Southwest District (48) 7%
UWEX Southeast District (262) 40%
UWEX Southcentral District (144) 22%
KEY
- No respondents
- 1-25 respondents
- 25 or more respondents

---

[1] For example, census data is based on all members of a household and project data is based on one member per household.

[2] In 1976, a special census study was performed in Wisconsin. That data will be used where available. In some cases the only census data available is from the 1970 census.

Location of Sample in State

Citizens in 63 of the 72 counties in Wisconsin were interviewed. As expected in a statewide representative survey, the majority of respondents were in the southeast part of the state where the greatest population resides.

Age

There was a somewhat higher percentage of respondents in the 25-34 age range than was found in the 1976 census study.

Age	Project Sample	From 1976 U.S. Census Study in Wisconsin
18-24	14%	19%
25-34	29%	20%
35-44	16%	15%
45-54	15%	16%
55-64	12%	14%
65-74	8%	10%
75 and over	6%	6%

Education

The survey respondents appeared to have completed somewhat more years of school than the Wisconsin adult population shown in the 1976 census survey.

Education	Project Sample	From 1976 U.S. Census Study in Wisconsin
Less than high school	20%	30%
High school degree	44%	42%
Some college	18%	16%
4 year of college	11%	8%
More than 4 years	8%	5%

The higher education level of the sample might be attributed to differences in year of data collection or to the possibility that persons with less than a high school education were more likely to refuse a survey.

Sex

There were slightly more women than men, but the percentages were very close to those in the 1976 census study.

Sex	Project Sample	From 1976 U.S. Census Study in Wisconsin
Men	49%	48%
Women	51%	52%

Occupations

There was a generally close fit between the occupations of those in the sample and data from the 1976 census for those age 18 and older. However, the bases of the data in the two studies differ slightly. The census records those who are retired or out of work in their previous occupation category; the project data analysis recorded them as retired or unemployed. The occupation groups are described more fully in Appendix B.

Occupation Groups	Project Sample	From 1976 U.S. Census Study in Wisconsin
Professional, Technical, Kindred	14%	10%
Farmer and Farm Manager	3%	3%
Managerial (nonfarm), official	10%	6%
Clerical, Kindred	12%	11%
Sales	3%	4%

Occupations (continued)

Occupation Groups	Project Sample	From 1976 U.S. Census Study in Wisconsin
Crafts, Kindred, Skilled	8%	10%
Service (Fire, Police, Nurse...)	6%	10%
Household Workers	1%	1%
Operative, Semi-skilled	8%	10%
Transportation	1%	2%
Laborers (nonfarm & farm), unskilled	3%	5%
No previous full-time work		28%
Retired, Unemployed, Housewife	31%	

Size of Home Community

The survey sample seemed to fit fairly well with 1970[1] U.S. Census population figures for Wisconsin. In both cases, over half of the people lived in a city of 10,000 or more people. The base of data in the two cases is slightly different. Census figures are based on the total population including all ages and the project sample is based on adults age 18 and over. There is also a difference of almost ten years in the time of data collection.

Size of Home Community	Project Sample	From 1970[1] U.S. Census Study in Wisconsin
Rural/Village/City under 2,500	31%	36%
2,500-9,999	15%	11%
10,000-24,999	9%	10%
25,000-49,999	12%	9%
50,000-99,999	14%	13%
100,000-249,999	4%	4%
250,000 and over	15%	16%

[1] Comparable data from the 1976 census was not available.

Other Characteristics

* Over half had total family incomes of more than $15,000.
* About half had children under 18 years of age living in the home.
* Two-thirds had lived in Wisconsin all their life. A fifth had lived in their present community all their life.